PILOT PROJECT No. 11

Integration of English and mathematics

FINAL REPORT and EVALUATION

PROJECT TITLE Integration of English and Mathematics

PILOTING INSTITUTION(S) VASVU

PILOTING INSTRUCTOR(S) Aleid Knoote, Wilfried Meffert, Kees Smit

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PROJECT SUMMARY

The overall goal was to enhance the use of English (as a third language) for reading scientific texts. The specific objective is that students will be able to study an applied mathematical text and make a brief presentation about its contents.

TARGET GROUP

The group consisted of 10 VASVU students who opt for university studies like economics and computer science. Majority male, aged between 18-30, from all over the world. Language proficiency Dutch: ranging from A2 to C1. English reading skills: A2 to C2 (according to the CEF, the Common European Framework).

PILOT PROJECT RELATION TO CHAGAL PRINCIPLES

- a) It prepares students for the actual situation in their future study and they will thus be more competent for the tasks ahead.
- b) The project integrates various subject skills and crosses the boundary between language and science.

It confronts the learner with important requirements for successful study, that are not directly related to the main language of instruction

METHODOLOGY

- a) Materials were collected from real articles outside the existing curriculum
- b) Reading was done individually
- c) Presentation and discussion were through group work
- d) Where possible, drawings, figures and real objects were used

e) The instructor was facilitator, but the learners were the key players

ACTION PLAN

In January 2004, the lecturers English and mathematics have spent about half of the available contact hours on the project.

EXPECTED OUTCOMES

- a) The learners have realized that English is also important at Dutch universities
- b) Learners have an appreciation for articles that are not directly connected to the prescribed curriculum, but nevertheless do tell more about the subject

The learners have experienced a variety of skills related to different aspects of a presentation: preparing, content, language, communicating and discussing

ACTUAL OUTCOMES

- a) The learners have indeed seen how important reading skills in English are at Dutch universities and how it relates to the role of Dutch as the language of instruction
- b) The articles about applied mathematics were much appreciated and studied in detail, but it was not always that easy!

There were many more skills involved than usually, especially with regard to presenting findings.

LIST OF SUPPORTING DOCUMENTS

Reader 1: Short texts in English Reader 2: Questions referring to reader 1 (in Dutch) Reader 3: Long text in English Reader 4: Assignments for reader 2 (in Dutch)

Evaluation form for students Summary of evaluation form

PILOT PROJECT FINAL EVALUATION

- The added value of the pilot project for the group was that the students have been exposed to many more competencies than usual (such as study skills, presentations and group work). The integration of English, mathematics and Dutch was extremely useful, but not an easy task.
- 2. The pilot project guided students into specific aspects of academic study that were different from other situations. This was a valuable addition to the preparation for study next year. The pilot project was thus an important part of the foundation programme for university studies where the skills and competencies mentioned above are needed.
- 3. A summary of students' feedback is given in a supporting document of the appendix. The overall rating was 4.14 on a scale of 1 (minimum) to 5 (maximum).
- 4. The level of study language proficiency as pre-conditional for carrying out a project like our pilot project is higher than beginners, roughly intermediate/advanced, except for two non- native languages!
- 5. The added value of the pilot project for the academic community is limited. The emphasis in the pilot was on the target group, not on the community at large.
- 6. The extra work involved for the academic staff was about 6 hours per week during 4 weeks. The pilot project workload in terms of cost-benefit-ratio is positive, it was worth

the effort.

- 7. Concerning the sustainability:
 - It will be repeated next year for the foundation year.
 - The pilot project is not immediately transferable into mainstream learning at our institution due to its specialised nature.

APPENDIX:

6 Supporting Documents (see above)